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ABSTRACT

The nature of the work environment as perceived by non-instructional staff was studied at the University of Michigan. Content analysis was undertaken of responses to open-ended survey questions answered by 4,891 non-instructional staff. Qualitative data from the content analysis were analyzed and compared to results of a quantitative data analysis from the same survey about the nature of the work environment. Six content categories relating to the work environment emerged from the content analysis: salary and benefits issues, quality concerns, physical environment, general work environment, personal work experience, and staff development opportunities. Overall, the content analysis results reinforced the quantitative survey results. The 186 negative comments about quality (77.2 percent of all the quality comments made) were consistent with quantitative analysis findings suggesting that the University as a whole was not rated as having very supportive work processes. A larger percentage of positive comments was made about personal work experiences than about the general work environment. Some inconsistencies also appeared. While the opportunity for improvement training was rated favorably on the quantitative portion of the survey, most of the open-ended comments made about staff development (73.3 percent) were negative. Appendices detail the survey results. (Contains 38 references.) (SW)

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PERCEPTIONS OF NON-INSTRUCTIONAL STAFF AT THE UNIVERSITY OF MICHIGAN: A CONTENT ANALYSIS

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May 12, 1995

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Jean Endo
Editor
AIR Forum Publications

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I. INTRODUCTION

Non-instructional staff, a large and critical group within colleges and universities, have seldom been the focus of research studies. Differentiating them from faculty members and administrators, Deal & Jenkins (1994) describe the vital role non-instructional staff play in the institutions they serve:

> Operating behind-the-scenes, a third group goes about its important business with little attention and fanfare. This hidden cast of staff members, while often invisible, constitutes a major part of the workforce. Without these employees, the entire operation would collapse (p. 37).

According to the U.S. Department of Labor (1985), approximately 75% of the nation's workforce operates behind the scenes. Deal & Jenkins (1994) warn that behind-the-scenes employees are often subjected to poor treatment by supervisors or disregarded like disposable objects, and in response, often retaliate against this treatment in counterproductive ways. For example, they may reduce the effort they put into their jobs, have high rates of absenteeism, or terminate their employment. Non-instructional staff members' perceptions of the work environment can exert a distinct influence on the levels of quality and productivity in their work. An understanding of these perceptions can provide organizational managers with insights regarding how to prevent negative situations from arising in the higher education work environment.

This paper describes a conceptually-oriented, exploratory study of the nature of the work environment as perceived and defined by non-instructional staff. The study used content analysis of responses to open-ended questions which were part of a survey administered to non-instructional staff at the University of Michigan. Qualitative data from this content analysis were analyzed and compared to results of a quantitative data analysis from the same study to generate new insights into the nature of the work environment and to contrast the results of these two different modes of analysis.

II. RESEARCH QUESTIONS

Four broad research questions guided this analysis. They are:

1. What does content analysis suggest about the nature of the work environment for non-instructional staff?

2. In what ways does content analysis of open-ended question responses illuminate similar/different themes from the results of the quantitative survey?

3. Does content analysis of open-ended question responses suggest differences in content and nature of responses between different subgroups of non-instructional staff?

4. How does content analysis of open-ended questions add to our array of IR techniques and our understanding of the survey results?

III. LITERATURE REVIEW

The literature related to the higher education work environment, non-instructional staff in higher education, and qualitative research methodology were reviewed for this study. The work environment literature provides insights into sources of influence on staff members' perceptions of their work environment. The literature on non-instructional staff assists in the identification and understanding of higher education administrators, but also highlights behind-the-scenes staff. The literature on qualitative research methodology provides insights into the data analysis strategy used in this study.

A. Work Environment

There are several ways to conceptualize an organization's work environment: 1) as objective patterns of behavior or working conditions; 2) as the perceived patterns of behavior and attitudes related to that environment; or 3) as the underlying values and beliefs of the organization or its participants (Peterson, Cameron, Julia, Winn, Spencer, & Vander Putten, 1994). These concepts can be used to describe the organization's culture and climate which provides members with an

understanding of their organization, their internal work environment, and the meaning of their work (Peterson et al., 1986; Peterson & Spencer, 1990). Culture and climate also provide a framework for an organization's employees to make sense of the nonrational and informal aspects of their institutional environment (Peterson & Spencer, 1990). Both can be defined in several ways.

Organizational culture has been defined as "the basic assumptions and beliefs that are shared by the organization" (Schein, 1985), and "comprised of shared values, beliefs, and principles" (Dennison, 1990). Focusing on higher education, Peterson & Spencer (1990) described institutional culture as the "organizational glue" that holds the organization together. Chaffee & Tierney (1988) defined it as "the collective values held by members of the organization [which] derive [their] force from the traditions, processes, and goals held by those most intimately involved in the organization's working" (p.5). In higher education, cultural values are inherent in the institution's history, tradition, academic mission, governance processes, administrative methods, and delivery processes (Keller, 1983; Chaffee & Tierney, 1988; Peterson & Spencer, 1990; and Austin, 1990).

Peterson, Cameron, Jones, Mets, & Ettington (1986) defined climate as the "current, common patterns of important dimensions of organizational life or its members' perceptions of and attitudes toward them" and identified a set of seventeen academically-related dimensions to assess organizational and administrative climate. Schneider & Rentsch (1988) defined institutional climate as the organizational policies, practices, and procedures that communicate the goals that are important to an organization and create a sense of institutional imperative.

Peterson & Spencer (1990) contrasted climate as the current organizational "atmosphere" with culture as the longer term organizational "values."

Organizational culture and climate also pervade the literature on institutional efforts to implement quality improvement initiatives. Seymour (1993) identified a "culture of quality" in which members develop, share, and continually reinforce a common understanding of what quality is and how to pursue it. Cameron (1994) defined an organization's quality culture as "the general orientation or definition of quality adopted by an organization" (p. 15).

B. Non-Instructional Staff

White (1990) reported that several studies of colleges and universities found differences between administrator and faculty perceptions of their institutions (e.g., Austin & Gamson, 1983; Blackburn, Pitney, Lawrence, & Trautvetter, 1989; Bowen & Schuster, 1986). Additional studies by Peterson & White (1992), Birnbaum (1987), and Blackburn, Lawrence & Associates (1990), found that administrators and faculty at the same institution held different perceptions of the work environment. However, little research has been conducted on the organizational or work environment perceptions of non-instructional staff who do not hold administrative positions in colleges and universities. They are often overlooked as part of the vital framework of higher education institutions. For example, in a recent article on the nature of institutional research, Terenzini (1993) articulated the need for an "appreciation of and respect for the perspectives of students, faculty, administrators, trustees, parents, legislators, and governors" (p. 6), but made no mention of non-instructional staff members who are not administrators.

Personal and organizational dimensions can have a significant impact on how individuals perceive their work environment. Among the personal or individual characteristics that have been

considered in research are gender, age, ethnicity, level of education, and number of years in one's current position (Jones & James, 1979; Austin & Gamson, 1983; Lawrence, 1985; Asplund, 1988). Organizational variables include the structure of work, work processes, communication, and perceived leadership and support (Senge, 1990; Sherr, 1990; Deming, 1986). These variables can influence and shape the ways in which individuals perceive their work environment; these perceptions help to form individuals' perceptions of organizational culture and climate.

C. Content Analysis Methodology

Unlike quantitative analysis methodology and research designs, little agreement exists on a precise procedure for data collection, analysis, and reporting the results of qualitative research. According to Creswell (1994), qualitative researchers are interested in meaning: how people make sense of their lives, their experiences, and the structures of their environment. Qualitative approaches to conducting research, including institutional research (Fetterman, 1991), take a variety of forms, including interpretive, systematic, theory-driven, holistic ethnography, cognitive anthropology, and phenomenological interviewing (Attinasi, 1990, among others). In addition, qualitative researchers have research design options that can be drawn from a variety of disciplinary fields, including anthropology, psychology, social psychology, sociology, and education. As a result, the process of data analysis is eclectic, and no "one right way" exists (Tesch, 1990). It requires researchers to be open to possibilities, develop categories, make comparisons and contrasts, and consider alternative explanations for the findings. External validity (generalizability of findings) is not the intent of qualitative research; rather, the intent is to form a unique interpretation of events.

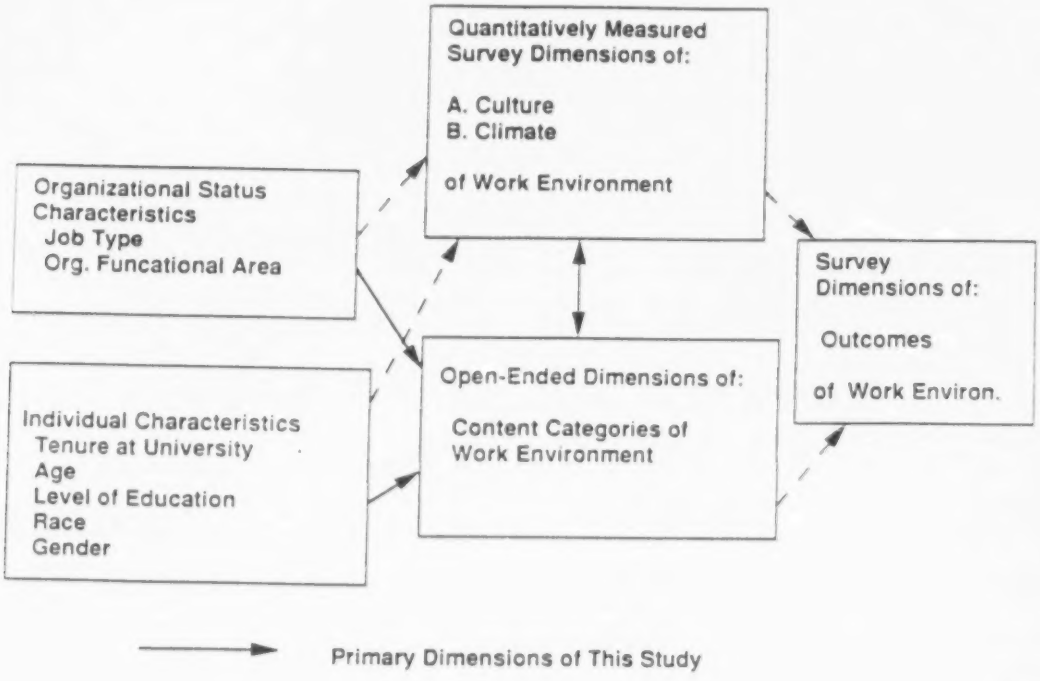
IV. CONCEPTUAL FRAMEWORK

As noted in the literature review, an organization's work environment can be conceptualized in terms of participants' perceptions of or reports of the culture and climate of their work setting. Organizational culture can be understood to be the basic assumptions, beliefs, and longer term values about their organization shared by members of an organization. Climate can be understood as the common perceptions of important dimensions related to policies, practices, and procedures in that setting, or the current atmosphere of an organization. In this study, the culture and climate of the work environment were measured in two different ways. In the quantitative survey, a quality-oriented work environment was measured in terms of culture, climate, and outcomes dimensions (see Appendix I). However, in the content analysis, on which this paper will focus, staff members' open-ended comments were used to allow content categories to emerge. The relationship of organizational status and individual characteristic variables identified in the literature review with the emergent content categories was the primary conceptual focus (see Figure 1).

The two organizational status variables which were related to the emergent content categories are job type and organizational functional area. Job types are defined as descriptive categories used to identify the primary vocational tasks undertaken by staff members while employed at the University. Functional areas are defined as organizational areas clustered by their primary functional purpose within the University. The five individual characteristics which were related to the emergent content categories are tenure, which is the number of years staff members have spent working at the University, age, level of formal education, race, and gender.

The research questions of this study (p. 2) focus on identifying the categories of the work environment that emerged from the content categories (Question 1); the relationship of the content categories to the survey dimensions (Question 2), and the extent to which individual and organizational characteristics influence participants' open-ended responses (Question 3).

Figure 1. Conceptual Framework:
Perceived Work Environment of Non-Instructional Staff



V. METHODOLOGY

A. Study Background

In 1989, the University of Michigan began to develop an institution-wide continuous quality improvement initiative which was designed to "pursue a problem-solving approach that would enlist the energy, intelligence, and imagination of administrators and staff in improving... work

systems" (University of Michigan[UM], 1994)." As part of the initiative, a research group at the University developed, tested, and administered an instrument designed to gather baseline data on non-instructional staff members' perceptions of their work environment. The survey instrument, which consists of 200 items that incorporate 35 quality culture and climate dimensions identified in the literature, was distributed to 10,400 non-instructional staff members. 4891 usable questionnaires (47.3%) were completed and returned. Please see Appendix 1 for a list of indices which emerged from the survey analysis.

An open-ended question was included at the end of the work environment survey to obtain respondents' perceptions of both their work environment and the survey instrument which asked: "What comments would you like to add about your work experiences at the University of Michigan?" Of the 4891 employees who returned the survey, 2461 (50.3%) responded to the question about the work environment. Since many respondents commented on more than one aspect of their work environment, a total of 3724 responses were identified.

B. Content Analysis Methodology

The content analysis procedure consisted of two distinct phases. The first phase began with a review of the open-ended responses by both researchers to develop broad coding categories reflecting the content of the response items. A second review followed to make broad category coding assignments. Thus, the analysis of open-ended responses was based on the broad content categories which emerged from the open-ended responses, not a predetermined set of categories. This approach is consistent with Creswell's (1994) suggestion that the purpose of qualitative research is to identify the experiences and structures of individuals' environments. A list of content categories and explanations of the kinds of responses which fell into each are included in Table 3.

In the second content analysis phase, a similar process was used to identify subcategories, make subcategory coding assignments, and reach consensus on those assignments. Efforts were made to preserve the essence of respondents' actual comments. These efforts resulted in the creation of a detailed list of content subcategories [This list is included in Appendix II]. In both phases of the content analysis, where discrepancies existed in the two researchers' coding decisions, a third reviewer provided assistance in the coding determination.

C. Data Analysis

Once the content analysis was completed, employees' responses had been broken into broad content categories. Frequencies were produced for all responses in each of the broad content categories and were arranged by negative, positive, and neutral responses in each of the content categories (Table 1). Responses in each of the broad content categories, and their positive, negative, and neutral nature, were also broken into subgroups by job type (Professional and Administrative, Specialists/Technicians, Office, Engineers/Trades/Service/Maintenance, Health-Related), organizational functional area (President's Office, Business and Finance, Academic Affairs, Student Affairs, Research, Development, University Relations-Government Relations), tenure at the University (0-4 Years, 5-10 Years, More Than 11 Years), age (Under 30, 31-40, 41-50, 51 and Older), level of education (Less Than Bachelor's, Bachelor's Degree and Bachelor's and Some Graduate Work, Master's, Doctorate, Other), race (Caucasian and Staff Members of Color), and gender (Appendix IV-X).

[Insert Table 1]

D. Response Pattern Comparisons

Open-ended comment response patterns by respondent characteristic were similar to the overall survey response patterns with a few notable exceptions (Table 2). While 16.9% of the survey respondents by job type fell into the engineers/trades/service/maintenance job category, only 9.9% of the open-ended comments were made by individuals in this group. Similarly, although 26.1% of the survey respondents by functional area are in the Business and Finance area, only 19.3% of the open-ended comments were made by individuals in this group. And, while 54.4% of the survey respondents by functional area work in Academic Affairs, 61.7% of the open-ended comments were made by individuals in this group. Although by degree level only 16% of the individuals who returned surveys hold master's degrees, 20.3% of the open-ended comments were made by individuals holding master's degrees. And, while 49.5% of the survey respondents have less than a bachelor's degree, a smaller percentage, 43.0%, of the open-ended comments were made by individuals in this subgroup. By gender, although 65.5% of the survey respondents were female, a larger percentage of the open-ended comments, 71.6%, were made by women. Men, who comprised 34.5% of the survey respondents, made a smaller percentage, 28.4%, of the open-ended comments. Open-ended comment response patterns were similar to the overall survey response patterns for staff members with different lengths of tenure at the University, staff members of different ages, and Caucasian staff members and Staff Members of Color. Thus, while there could be a variety of reasons for the differences in survey and open-ended comment response rates, the overall patterns by respondent characteristic are fairly similar.

[Insert Table 2 here]

VI. RESULTS

Analysis of the content categories led to a number of interesting observations which are reported in the following sections. The reader is reminded that the results are reported by comments rather than by individuals. The number of comments made by staff members within subgroups varied a great deal. As a consequence, while results are reported in the appendices in percentages as well as the actual number of comments made, the text primarily discusses percentages. This type of reporting allows differences in response patterns (for example, the difference between the percentage of negative, positive, and neutral comments in a particular broad content category) to emerge.

A. Emergent Content Categories

Six content categories relating to the work environment emerged from the content analysis and are included in Table 3.

Table 3: Work Experience Content Categories

1. *Compensation (Salary and Benefits) Issues*

Responses included in the "Compensation Issues" content category were related to 1) salary topics and 2) benefits. Individual responses often encompassed more than one of the compensation items. Comments about equity, adequacy, and the effects of compensation on morale and work ethic were also included in this content category.

2. *Quality Concerns*

Responses in this content category included those which address involvement in and integration of quality improvement initiatives by individual units and central administration, dissemination of quality principles, and the effects of quality principles on employees and the work environment.

3. *Physical Environment*

Comments included in this content category fell into two groups. The first group of responses addressed issues related to parking, while the other addresses issues such as building renovations, deferred maintenance, building cleanliness, and the adequacy of personal workspaces.

4. *General Work Environment*

Responses in the "General Work Environment" content category related to the University as a whole, rather than to individual experiences. Comments in this category addressed reasons why respondents perceive the University's environment to be positive or negative, general staff issues, organizational procedures and structure, issues related to administration, opportunities for advancement and job change, communication issues, and how the general work environment has changed over time.

5. *Personal Work Experience*

Responses were included in this content category when they related to staff members' individual experiences at the University. Comments included those which related to descriptions of, and relationships with, coworkers and other staff, experiences with supervisors and managers, characteristics of work units, morale issues, and personal attitudes (e.g., feel stressed, attempting to leave University).

6. *Staff Development Opportunities*

Responses in this content category were related to opportunities for staff development and training and opportunities for job rotations for the purpose of development.

B. Nature of Responses by Content Category

Table 1 shows the number of positive, negative, and neutral comments by broad content category. Overall, the majority of open-ended comments were negative (79.4%). Within the content categories, the percentage of negative comments ranged from 68.8% to 100%, while the percentage of positive comments ranged from 0% to 25.7%. The largest number of open-ended comments was included in the General Work Environment and Personal Work Experience content categories (1489 and 1511, respectively). Staff members made a larger percentage of positive comments about their personal work experiences (25.7%) than the general work environment (9.3%).

C. Comparison of Content Categories and Survey Dimensions

Table 4 shows the overlaps between the culture, climate, and outcome indices which were assessed by the survey and the work environment content categories which emerged from the content analysis. As is evident from the table, non-instructional staff members raised a number of the same issues in their open-ended responses as were assessed through the survey. However, staff members' open-ended comments also provided information, both content-specific and sentiment-specific, which was not captured by the survey.

As is evident from Table 4, two of the content categories, Compensation and Physical Environment, were not addressed on the survey at all. The open-ended comments which fell into these two content categories primarily addressed salary levels, increases, benefits, parking, and the condition of the University's facilities. They provide evidence of issues which were important to staff members but which were not measured by the survey. These sentiments as noted before were primarily negative.

The open-ended comments which fell into the Quality content category demonstrate some consistency with the survey indices. Many of the comments are consistent with the survey indices which assessed the University's quality improvement culture, its quality philosophy and change orientation, planning for improvement and innovation, and unit leadership. The negative open-ended comments about quality (77.2% of all of the quality comments made) are also consistent with the quantitative analysis findings which suggest that the University as a whole is not rated as having very supportive work processes.

The open-ended comments in the General Work Environment content category are consistent with the survey indices in a number of regards, as is evident in Table 4. Open-ended

comments are consistent with some of the quality culture and climate indices and one of the quality outcome indices which were assessed. The many open-ended comments made about the University's bureaucratic, hierarchical nature are consistent with the dominant hierarchy culture which emerged from the survey analysis. Analysis of the survey results also pointed to five themes into which the survey items receiving the lowest ratings could be clustered. Of those five themes, four are consistent with the results of the content analysis: Staff Recognition, Staff Involvement, Staff Morale, and Facilitative Organization (effectiveness of training evaluated, step-by-step problem-solving process, bureaucratic roadblocks eliminated, use information for work improvements, unit has clear performance standards). Open-ended comments addressed a lack of recognition of hard work and innovation, a lack of involvement in the decision-making process, low morale, supervision/management being unsupportive and incompetent, the University being hindered by bureaucracy, and units lacking clear goals and planning.

Many of the open-ended comments which fell into the Personal Work Experience content category are consistent with the quality culture, climate, and outcomes indices which assessed issues related to staff members and work units. Specific open-ended comments addressed the quality improvement culture and quality philosophy and change orientation within units, the supportiveness of unit climates, planning for improvement and innovation, satisfying customers, collecting information, the efficiency of units, the leadership within units, staff relations, the supportiveness of staff relationships, overall unit performance, and the rate of improvement. Survey analysis demonstrated that while staff members view their personal work and fellow staff members as assets, the institutional context can be improved. Consistent with these results, a larger

percentage of positive comments was made about personal work experiences than about the University's general work environment (25.7% compared to 9.3%).

The types of comments which fell into the Staff Development content category are consistent with the professional development quality climate category. The breakdown of positive and negative open-ended comments about staff development (73.3% negative and 24.8% positive) is fairly consistent with the quantitative findings that while the University is supporting staff through staff development, it is criticized for the perceived ineffectiveness of these opportunities.

Overall, as is evident in Table 4, the content analysis results are consistent with the results of the quantitative survey in variety of ways. However, the content analysis results provided content and sentiment-specific information which was not captured by the survey instrument.

[Insert Table 4 here]

D. Compensation Category

Anonymous Respondent

"I enjoy working here. I like the people I work with. I would like to stay in my current position, but I'm paid so poorly that I will eventually have to leave."

Anonymous Respondent

"I like working for the U. The U. offers security, great benefits, and opportunities."

Anonymous Respondent

General Observations

The direct quotations listed above are representative of the kinds of comments non-instructional staff members made about compensation. Of the 275 comments made about

compensation, 222 (80.7%) were negative. All of the 53 (19.3%) which were positive addressed the University's strong benefits packages (Table 1).

Respondent Patterns

A breakdown by respondent characteristics illuminated a few interesting patterns (Appendix IV-X). For example, by job type, only 36.4% of the compensation responses for health-related staff members were negative, while at least 80% of the compensation responses for staff members in all other types of jobs were negative. Employees working in Student Affairs and Research also had a higher percentage of positive compensation comments (31.6% and 46.7%, respectively) than non-instructional staff working in other University areas. Men made a larger percentage of negative comments about compensation than women (87.5% compared to 76.4%).

Frequent Comments

Appendix III lists the frequently made individual comments and the number of times they were mentioned by staff members. Three individual comments, that a salary disparity exists (32 mentions), that increases are unfair (41 mentions), and that benefits are good (53 mentions), were the most frequently mentioned compensation comments.

E. Quality Concerns Category

"My unit is not an example of M-Quality. I, personally, saw it as an opportunity for improvement, but my unit's leadership denigrated M-Q before we even went to the intro. to M-Q. We work on the squeaky wheel theory."

Anonymous Respondent

"Leadership makes all the difference. My unit head believes and practices C.I., therefore expectations are clear. We know when it is appropriate to work independently and when to work collaboratively."

Anonymous Respondent

General Observations

The comments related to quality addressed the involvement and integration of Total Quality Management, including the willingness of management to participate in the quality initiative, the dissemination of Total Quality Management principles, and the positive and negative effects of Total Quality Management. Of the 241 comments made about quality, 186 (77.2%) of them were negative, while 28 (11.6%) were positive and 27 (11.2%) were neutral (Table 1).

Respondent Patterns

An analysis by respondent characteristic revealed few noteworthy results. The organizational functional area with the largest percentage of positive quality comments was Business and Finance (20.9%), while the area with the largest percentage of negative comments about quality (92.6%) was Student Affairs. The newest members of the University community, those staff who have been with the University for fewer than five years, made a larger percentage of negative comments about quality (81.4%) than did staff members who have worked at the University for a longer period of time. By age, staff members between the ages of 31 and 40 made a larger percentage of negative comments about quality (87.7%) than staff members who fell into different age groups (the next highest percentage was 75.0% for employees under 30). When responses were broken down by level of education, staff members with less than a bachelor's degree had the largest percentage of positive comments about quality excluding the "other" category (16.5%) (Appendix IV-X).

Frequent Comment

One comment, that management is not committed to quality initiatives, was mentioned more frequently than any other comments which fell into this content category (48 mentions) (Appendix III).

F. Physical Environment Category

"As pleasant as I find working here, I find it hard to believe that the U. manages to curb discussion on and avoid solving the most aggravating & frustrating problem - parking! This one issue causes doubt about how much the U. really cares about the welfare and satisfaction of its employees. They just can't keep sweeping it under the rug. Having hundreds of disgruntled employees every morning can't help the attitude toward our customers."

Anonymous Respondent

"The work environment is becoming too crowded: Offices are being built in hallways, people being crowded within their offices, buildings being built that crowd each other and the campus's open spaces."

Anonymous Respondent

General Observations

Of all of the content categories, the second fewest number of comments was made about the University's physical environment. All 107 of those comments were negative (Table 1).

Respondent Patterns

Because all of the comments made about the physical environment were negative, the comments in each of the respondent characteristic subgroups were also negative. Thus, a comparison by respondent characteristic subgroup by percentage of positive and negative comments was not possible. (Appendix IV-X).

Frequent Comment

The most frequently mentioned comment about the physical work environment was that the parking situation is poor and the availability of parking facilities is inadequate (47 mentions) (Appendix III).

G. General Work Environment Category

"All too often, management at the U. is promoted based upon longevity, not knowledge or management skills. They bring with them an old style of management - do as I say, not as I do & don't question my decisions. Their own performance insecurities cause real conflicts with competent staffs."

Anonymous Respondent

"The managers are too focused on their budgets. If they took care of the staff, the staff would take care of the unit for them. Penny-ante politics and penny pinching, power-abusing managers are unfortunately not the exception. This makes for a stressful work environment plus resistant workers."

Anonymous Respondent

General Observations

General Work Environment was one of the two content categories into which the largest number of open-ended comments fell. Of the 1489 comments made, 1328 (89.2%)were negative, while 138 (9.3%) were positive and 23 (1.5%) were neutral (Table 1).

Respondent Patterns

A breakdown by respondent characteristic illuminated some interesting patterns. When comments about the general work environment were broken down by type of job, engineers/trades/service/maintenance workers were shown to have made the largest percentage of positive comments excluding the "other" category (15.2%). Of all of the organizational functional areas, Business and Finance staff members made the largest percentage of positive comments about

the general work environment (17.0%). Although the percentages were close to one another, younger staff members, those under the age of 30, made the largest percentage of negative comments about the general work environment (91.5%), while older employees, those between the ages of 41 and 50 and 51 and older, made the largest percentage of positive comments (10.3% and 11.6%, respectively). By level of education, excluding the "other" category, staff members with less than a bachelor's degree made the largest percentage of positive comments about the general work environment (11.0%). Broken down by race, Staff Members of Color made a larger percentage of positive comments than Caucasian staff members (14.3% compared to 8.8%). In a breakdown by gender, women made a larger percentage of negative comments about the general work environment than men (91.1% compared to 85.4%). (Appendix IV-X)

Frequent Comments

Frequently mentioned individual comments about the general work environment, which are listed in Appendix III, range from concerns about the University's environment being too competitive and bureaucratic to staff members being poorly treated and not being included in decision-making, to the University being a great place to work. Within this broad category, the three comments mentioned most frequently were: the university is a good/great place to work (102 mentions); staff members are poorly treated/undervalued/unsupported/less valued than faculty members (107 mentions); administration/management is weak (122 mentions).

H. Personal Work Experience Category

"My staff are capable, independent, and extremely hard-working. This is not a bureaucratic group. They work long hours and we are constantly attempting to streamline and improve procedure to get log jams removed and stress reduced. We operate by consensus for the most part."

Anonymous Respondent

"I feel the supervisory and administrative people within my unit are remarkably unqualified. Lack of supervision and inept admin. seriously limits the effectiveness of this unit."

Anonymous Respondent

General Observations

Personal Work Experience is the other content category into which the largest number of open-ended comments fell. Of the 1511 total responses, 1040 (68.6%) were negative, while 389 (25.7%) were positive and 82 (5.4%) were neutral. Both the number and percentage of positive comments (389 and 25.7%) are larger than the number and percentage of positive comments made about the General Work Environment (Table 1).

Respondent Patterns

A breakdown by respondent characteristic demonstrates some interesting response patterns. Of the five main job type categories (excluding "other"), professional and administrative and office non-instructional staff made the largest percentage of positive comments about their personal work experiences (27.2% and 28.9%, respectively). Within the organizational functional area category, staff members in the President's Office and Research made the largest percentage of positive personal work experience comments (38.9% and 38.7%, respectively). Business and Finance staff members made the largest percentage of negative comments (76.8%). The under 30 age group had a larger percentage of negative comments about personal work experience than all of the other age categories (76.5%). By level of education, staff members with doctorates made the largest percentage of negative comments about personal work experiences (73.3%). Caucasian staff members and Staff Members of Color made similar percentages of negative and positive personal work experience comments, with Staff Members of Color slightly more positive than Caucasian

staff members (30.0% compared to 24.9%). When a breakdown by gender was done, males had a larger percentage of negative comments about personal work experiences than women (76.0% compared to 66.7%) (Appendix IV-X).

Frequent Comments

The frequently mentioned individual comments about non-instructional staff members' personal work experiences covered topics such as coworkers, treatment by supervisors/managers, supervisors'/managers' leadership ability, communication, morale, treatment of support staff, and recognition of hard work and innovation. The three most frequently expressed individual comments were: coworkers and other staff are supportive/good to work with (111 mentions); staff member's supervisor/manager has poor leadership and management skills (is incompetent) (162 mentions); unit's workload is excessive/unit is understaffed for its workload (53 mentions) (Appendix III).

I. Staff Development Opportunities Category

"Budget cuts are seriously affecting morale across the U. A lack of opportunity for staff development has hampered our ability to do our jobs. This situation will become much worse very soon."

Anonymous Respondent

"For the most part, the U of M encourages growth on the personal and professional levels. For this reason, I think the U has a lot to offer."

Anonymous Respondent

General Observations

The fewest number of comments in any content category was made about staff development opportunities. Rather than addressing the quality of staff development/training, most of the

comments addressed the opportunity (or lack of opportunity) for staff development . Of the total 101 responses, 74 (73.3%) were negative, while 25 (24.8%) were positive and 2 (2.0%) were neutral (Table 1).

Respondent Patterns

When comments about staff development opportunities were broken down by respondent characteristic, several interesting response patterns emerge. Broken down by type of job, office staff had the highest percentage of positive comments (48.0%). Although the actual number of comments was quite small, specialists/technicians and engineers/trades/service/maintenance staff members made the largest percentage of negative comments about staff development (100%). The organizational functional area with the largest percentage of positive comments about staff development was Research (63.6%). Staff members who have been with the University for the shortest period of time (0-4 years) made the largest percentage of positive comments about staff development (30.2%). Non-instructional staff members in the 31-40 age range made the largest percentage of negative comments about staff development (87.5%). By level of education, staff members with master's degrees had the largest percentage of negative comments about staff development (87.9%). Women made a larger percentage of positive comments about staff development than men (26.0% compared to 20.8%) (Appendix IV-X).

Frequent Comment

One comment about staff development, that there is insufficient opportunity for staff development and training, was mentioned more frequently than any other comments which fell into this content category (32 mentions) (Appendix III).

IV. DISCUSSION

A. Nature of the Work Environment for Non-Instructional Staff

The open-ended comments provide useful information about the nature of the work environment for non-instructional staff. The vast majority of open-ended comments were negative, suggesting that most of the staff members who took the time to respond to the open-ended question did so because they wanted to express concerns. The most frequently mentioned comments give an indication of the issues which were most salient to respondents. The large number of comments which fell into the General Work Environment and Personal Work Experience content categories, as well as the large number of frequently mentioned individual comments within those categories, suggests that those are the two broad areas of most concern/interest to respondents. The larger percentage of positive comments falling into the Personal Work Experience content category (25.7%) than the General Work Environment content category (9.3%) suggests that the staff members who made open-ended comments are more satisfied with their personal work experiences than they are the University's general work environment.

B. Comparison to Quantitative Results

Table 4 demonstrates the overlap which exists between the culture, climate, and outcomes indices of a quality-oriented work environment which were assessed on the survey and the categories which emerged from the open-ended comments which were made by non-instructional staff members. It also provides information about two areas, compensation and the University's physical environment, which the survey instrument did not address but were areas of interest or concern to staff members.

Overall, the content analysis results reinforced the quantitative survey results. For example, the 186 negative comments about quality (77.2% of all of the quality comments made) are consistent with the quantitative analysis findings which suggest that the University as a whole is not rated as having very supportive work processes. Similarly, the negative comments about staff development opportunities (73.3% of all comments about staff development) are fairly consistent with the quantitative findings that while the University is supporting staff through staff development, it is criticized for the perceived ineffectiveness of these opportunities. Additionally, the survey analysis demonstrated that staff members view their personal work and fellow staff members as assets, but that the institutional context can be improved. Consistent with these results, a larger percentage of positive comments was made about personal work experiences than about the University's general work environment (25.7%, or 389 comments, compared to 9.3%, or 138 comments). A number of individual open-ended comments, such as those which addressed a lack of recognition of hard work and innovation, a lack of involvement in the decision-making process, low morale, supervision/management being unsupportive and incompetent, the University being hindered by bureaucracy, units lacking clear goals and planning, and coworkers being qualified and good to work with, are consistent with clusters of items on the quantitative survey receiving the highest and lowest overall rankings.

Several quantitative results were inconsistent with the open-ended comment results. While opportunity for improvement training was rated favorably on the quantitative portion of the survey, most of the open-ended comments made about staff development (73.3%) were negative. In addition, although the quantitative findings suggest that staff members' perceptions of their work climate are slightly favorable overall, the small percentage of positive open-ended comments about

general work environment suggests that most of the staff members who made comments about the general work environment expressed some kind of concern or dissatisfaction.

Thus, while many of the open-ended comments made by staff members were consistent with the survey categories which were assessed, the content analysis results provide new information, both content and sentiment-specific, about the nature of the work environment for non-instructional staff.

C. Comparison by Respondent Characteristic

Analysis of the open-ended comments by respondent characteristic led to some interesting observations about non-instructional staff members. An analysis by type of job demonstrated that specialists/technicians made the largest percentage of negative comments about personal work experiences, while staff members in office jobs made the largest percentage of positive comments about staff development. Excluding the "other" category, staff members in engineering/trade/service/maintenance jobs made the largest percentage of positive comments about the general work environment. Staff members in health-related jobs made the largest percentage of positive comments about compensation.

An analysis by organizational functional area demonstrated that staff members in Business and Finance made the largest percentage of positive comments about quality and the general work environment, and the largest percentage of negative comments about personal work experiences. Staff members in Student Affairs made the largest percentage of negative comments about quality, while staff members in Research made the largest percentage of positive comments about compensation and staff development. Although the actual number of comments made was small,

staff members in Development made the largest percentage of negative comments about compensation and staff development.

By number of years spent working at the University, staff members in the 0-4 year category made the largest percentage of negative comments about quality and the largest percentage of positive comments about staff development. Staff members in the 5-10 year tenure category made the largest percentage of negative comments about compensation and the largest percentage of positive comments about quality.

When an analysis was done by age, staff members under the age of 30 were shown to have made the largest percentage of negative comments about personal work experiences. Staff members in the 31-40 age range made the largest percentage of negative comments about compensation, quality, and staff development, while staff members ages 51 and older made the largest percentage of positive comments about quality and staff development.

By level of education, staff members with less than a bachelor's degree made the largest percentage of positive comments about the general work environment and compensation (with the exception of the "other" category) and staff members with master's degrees made the largest percentage of negative comments about staff development. Staff members with doctorates made the largest percentage of negative comments about compensation.

When an analysis was done by race, Staff Members of Color where shown to have made the largest percentage of positive comments about both the general work environment and their personal work experiences. Caucasian staff members made the largest percentage of negative comments about compensation.

Males were shown to have made the largest percentage of negative comments about compensation, personal work experiences, and staff development. Females made the largest percentage of negative comments about the general work environment.

D. Contributions and Limitations of Content Analysis Results

The content analysis results provide evidence of the perceptions held by some University non-instructional staff members. They suggest areas of concern to some employees and raise issues which were not addressed on the survey, such as compensation and the University's physical environment. They also suggest areas which may be pinpointed for future research.

The content analysis results reinforce some of the issues/trends suggested by quantitative results, such as concern about the lack of staff recognition and staff involvement and concerns about staff morale. The differences in results suggest that quantitative data might not tell us the "whole story" when it comes to employees' perceptions. For example, while the quantitative results suggest that staff members' perceptions of their work climate are slightly favorable overall, the content analysis results suggest that more exploration about some of the specifics of the general work environment might be worthwhile.

On their own, the content analysis results raise questions and suggest some areas for future research. For example, are the issues expressed by respondents concerns of many staff members, including those who did not respond to the open-ended question at all? Are staff members who work in particular units within the University really more satisfied with certain aspects of their work environment than staff members who work in other areas? Do staff members between the ages of 31 and 40 really have more negative perceptions of compensation, quality, and staff development than staff members in other age categories? Do Staff Members of Color really have more favorable

impressions than Caucasian staff members of the general work environment and their personal work experiences? Are women really more satisfied with their compensation than men? Are women really more satisfied with their personal work experiences than they are with the general work environment? Is the opposite really true for men? If so, why is this the case?

The content analysis data provide direction for future research and suggest avenues which may be worthy of exploration. However, it is necessary to keep in mind the limitations of the data. First, there were very different response rates and numbers of comments made by respondent subgroups. For example, by type of job, while 2021 comments were made by professional and administrative staff members, 965 comments were made by staff members in office positions, and 196 comments were made by specialists and technicians. Similarly, 3223 comments were made by Caucasian staff members, while only 379 comments were made by Staff Members of Color. In addition, we do not know anything about the staff members in each category who did not make a particular kind of comment. Are those people more satisfied, less satisfied, or different in any way from those people who did respond? Not only do we not know why staff members did or did not respond, but we have no way of knowing whether staff members share the perceptions of those people who did comment but did not take the time or think to make a similar comment. Perhaps the people who did comment did so because they had stronger feelings, either positive or negative, about particular issues. It is also possible, however, that staff members who did not comment share the sentiments of staff members who did. It is important to be cognizant of the limitations of this kind of data and the danger of generalizing from them.

There are also dangers associated with placing open-ended questions at the end of a long closed-ended survey. This approach may not provide respondents the opportunity to approach the

questions with truly "open minds," since they have just spent time thinking about the particular issues raised in the survey. The long survey also may have resulted in respondents not taking the time to respond to the open-ended question as freely, thoroughly, or thoughtfully as they might have in a different situation.

The content analysis results do provide us with valuable information. For example, the majority of non-instructional staff members who commented were most interested in describing aspects of the general environment and their personal work experiences, and as many as 162 staff members made the same comment, indicating that there are shared perceptions about aspects of the work environment. In addition, staff members raised issues which were not covered in survey, such as compensation and the physical work environment, which deserve further exploration. Thus, providing the opportunity for non-instructional staff members to respond to an open-ended question on the work environment survey allowed information to emerge which did not emerge from the quantitative analysis.

REFERENCES

Asplund, G. (1988). Women managers: Changing organizational cultures. Chichester, GB: Wiley.

Attinasi, L. (1990, Fall-Winter). Phenomenological interviewing in the conduct of institutional research: An argument and an illustration. AIR Professional File No. 38. Tallahassee, FL: The Association for Institutional Research.

Austin, A. (1990). Faculty cultures, faculty values. In W. Tierney (Ed.), Assessing academic climates and cultures (pp. 61-74). San Francisco: Jossey-Bass.

Austin, A., & Gamson, Z. (1983). Academic workplace: New demands, heightened tensions. ASHE-ERIC Higher Education Research Report No. 10. Washington, DC: Association for the Study of Higher Education.

Bemowski, K. (1991). Restoring the pillars of higher education. Quality Progress, 37-42.

Birnbaum, R. (1987). Individual preferences and organizational goals: Consistency and diversity in the futures desired by campus leaders. Paper presented at the annual meeting of the Association for the Study of Higher Education, Baltimore.

Blackburn, R., Lawrence, J. and Associates. (1990).Same institution, different perceptions: Faculty and administrators report on the work environment. Publication of the National Center for Research to Improve Postsecondary Teaching and Learning. Ann Arbor: University of Michigan.

Blackburn, R., Pitney, J. Lawrence, J., & Trautvetter, L. (1989). Administrators' career backgrounds and their congruence with faculty beliefs and behaviors. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Bowen, H, & Schuster, J. (1986). American professors: A national resource imperiled. New York: Oxford University Press.

Coate, L. (1991). Implementing total quality management in a university setting. In L. Sherr and D. Teeter (Eds.), Total quality management in higher education (pp. 27-38). San Francisco: Jossey-Bass.

Blackburn, R. T., & Lawrence, J. (1991). Faculty as a Key Resource: A Manual for Institutional Self-Study. Ann Arbor: University of Michigan, NCRIPTAL.

Cameron, K. (1994). Downsizing, quality, and performance. In R. Cole (Ed.), The fall and rise of the American quality movement. Unpublished manuscript.

Chaffee, E. & Tierney, W. (1988). Collegiate culture and leadership strategies. New York: MacMillan.

Creswell, J. (1994). Research design: Qualitative and quantitative approaches. Thousand Oaks, CA: Sage.

Deal , T. & Jenkins, W. (1994). Spotlighting backstage employees. NACUBO Business Officer, 36-41.

Deming, W. (1986). Out of the crisis. Cambridge, MA: MIT Center for Advanced Engineering Study.

Dennison, D. (1990). Corporate Culture and Organizational Effectiveness. New York: John Wiley & Sons.

Feldberg, R., & Glenn, E. (1979). Male and female: Job versus gender models in the sociology of work. Social Problems, 26, 524-538.

Fetterman, D. (1991). Using qualitative methods in institutional research. New Directions for Institutional Research, No. 72. San Francisco: Jossey-Bass.

Jones, A., & James, L. (1979). Psychological climate: Dimensions and relationships of individual and aggregated work environment perceptions. Organizational Behavior and Human Performance, 23, 201-250.

Keller, G. (1983). Academic strategy: The management revolution in American higher education. Baltimore: Johns Hopkins Press.

Lawrence, J. (1985). Developmental needs as intrinsic incentives. In Roger Baldwin (Ed.). Incentives for faculty vitality. New Directions for Higher Education, No. 51, pp. 59-68. San Francisco: Jossey-Bass.

Loo, C., & Rolison, G. (1986). Alienation of ethnic minority students at a predominantly White university. Journal of Higher Education, 57, 58-77.

Mills, A. (1988). Organization, gender, and culture. Organizational Studies, 9(3), 351-369.

Morgan, G. (1986). Images of organization. Beverly Hills, CA: Sage.

Peterson, M.., Cameron, K.S., Jones, P., Mets, L.A., & Ettington, D. (1986). The organizational contest for teaching and learning: A review of the research literature. Ann Arbor: NCRIPTAL, University of Michigan.

Peterson, M., Cameron, K., Julia, J., Winn, B., Spencer, M., & Vander Putten, J. (1994, May). Assessing the culture and climate for quality improvement in the work environment. Paper presented at the Association for Institutional Research Forum, New Orleans, LA.

Peterson, M. & Spencer, M. (1993). Qualitative and quantitative approaches to academic culture: Do they tell us the same thing? In J. Smart (Ed.), Higher education: Handbook of theory and research, Vol. IX, pp. 344-388. New York: Agathon.

Peterson, M., & White, T. (1992). Faculty and administrator perceptions of their environments: Different views or different models of organization? Research in Higher Education, 33(2), 177-204.

Schneider, B., & Rentsch, J. (1988). Managing climates and cultures. In J. Hage (Ed.), Futures of organizations: Innovating to adapt strategy and human resources to rapid technological change (pp. 181-200). Lexington, MA: Heath.

Senge, P. (1990). The fifth discipline: The art & practice of the learning organization. New York, NY: Doubleday/Currency.

Seymour, D. (1993). On Q: Causing quality in higher education. Phoenix: Oryx.

Seymour, D. & Collett, C. (1991). Total quality management in higher education: A critical assessment. Report 91-01. Methuen, MA: GOAL/QPC.

Sherr, L. (1990). Is there a better way to manage higher education? In T. Karolewski (Ed.). Higher education and the future: Initiatives for institutional research. Tallahassee, FL: The Association for Institutional Research.

Terenzini, P. (1993). On the nature of institutional research and the knowledge and skills it requires. Research in Higher Education, 34(1), 1-10.

Tesch, R. (1990). Qualitative research: Analysis types and software tools. New York: Falmer.

U.S. Department of Labor (1985). Handbook of labor statistics. Washington, D.C.: Bureau of Labor Statistics.

Weisbord, M. (1990). Productive workplaces: Organizing and managing for dignity, meaning, and community. San Francisco: Jossey-Bass.

TABLE 1. POSITIVE, NEGATIVE, AND NEUTRAL COMMENTS BY CONTENT CATEGORIES

COMMENTS:	COMPEN-SATION	QUALITY CONCERNS	PHYSICAL ENVIRON-MENT	GENERAL WORK ENVIRON-MENT	PERSONAL WORK EXPER-IENCE	STAFF DEVELOP-MENT	TOTAL
TOTAL:	275 (100%)	241 (100%)	107 (100%)	1489 (100%)	1511 (100%)	101 (100%)	3724 (100%)
NEGATIVE	222 (80.7%)	186 (77.2%)	107 (100%)	1328 (89.2%)	1040 (68.8%)	74 (73.3%)	2957 (79.4%)
POSITIVE	53 (19.3%)	28 (11.6%)	0 (0.0%)	138 (9.3%)	389 (25.7%)	25 (24.8%)	633 (17.0%)
NEUTRAL	0 (0.0%)	27 (11.2%)	0 (0.0%)	23 (1.5%)	82 (5.4%)	2 (2.0%)	134 (3.6%)

TABLE 2. COMPARISON OF COMMENTS BY RESPONDENT CHARACTERISTIC AND THEIR RESPONSE RATES TO SURVEY

	Number of Comments Out of Total for Subgroup	% of Comments Out of Total for Subgroup	% of Survey Respondents Out of Subgroup Total
TYPE OF JOB	3671		
P&A	2021	55.1%	50.4%
Specialists/Tech.	196	5.3%	3.9%
Office	965	26.3%	25.7%
Eng./Trade/Main./Svc.	362	9.9%	16.9%
Health-Related	125	3.4%	3.0%
Other	2	0.0%	0.0%
FUNCTIONAL AREA	3672		
President's Office	32	0.9%	1.7%
Bus. and Finance	709	19.3%	26.1%
Academic Affairs	2267	61.7%	54.4%
Student Affairs	324	8.8%	9.9%
Research	233	6.3%	6.0%
Development	52	1.4%	0.9%
Univ. Relations	55	1.5%	1.1%
TENURE AT U.	3686		
0-4 Years	1082	29.4%	29.4%
5-10 Years	1253	34.0%	32.9%
11+ Years	1351	36.7%	37.8%
LEVEL OF ED.	3689		
Less than Bachel.	1589	43.0%	49.5%
Bach./Some Grad	1225	33.1%	30.0%
Master's	749	20.3%	16.0%
Doctorate	93	2.5%	3.4%
Other	42	1.1%	1.2%
AGE	3675		
Under 30	694	18.9%	18.1%
31-40	1175	32.0%	31.5%
41-50	1213	33.0%	31.9%
51 and Older	593	16.1%	18.5%
GENDER	3670		
Male	1043	28.4%	34.5%
Female	2627	71.6%	65.5%
RACE	3602		
Caucasian	3223	89.5%	87.0%
Non-Caucasian	379	10.5%	13.0%

PLEASE NOTE: NUMBER OF TOTAL COMMENTS IS NOT THE SAME FOR ALL RESPONDENT SUBGROUPS BECAUSE NUMBER OF COMMENTS WHICH COULD NOT BE CLASSIFIED BY SUBGROUP VARIED.

TABLE 4. COMPARISON OF QUANTITATIVE SURVEY DIMENSIONS AND CONTENT ANALYSIS CATEGORIES

Content Analysis Categories

Survey Dimensions	COMPEN-SATION	QUALITY	PHYSICAL ENVIRONMENT	GENERAL WORK ENVIRONMENT	PERSONAL WORK EXPERIENCE	STAFF DEVELOPMENT
Organizational Culture				X		
Quality Improve. Culture		X		X	X	
Quality Philosophy		X		X	X	
Climate Indices						
Support. Unit Climate					X	
Plan. for Improvement		X		X	X	
Satisfying Those Served				X	X	
Suppor. Work Processes				X	X	
Collect Information				X	X	
Use Information						
Role of Information				X		
Unit Efficiency					X	
Unit Leadership		X			X	
Staff Relations					X	
Professional Develop.						X
Quality Outcome Indices						
Support. Staff Relation.					X	
Improving Outputs		X				
Unit Performance					X	
Rate of Improvement		X		X	X	
Numbers of Errors						
Cost of Services						

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SURVEY INDICES

Quality Culture Indices

Organizational Culture

- Clan
- Adhocracy
- Hierarchy
- Market

Quality Improvement Culture

- Status Quo
- Error Detection
- Error Prevention
- Continuous Improvement

Quality Philosophy and Change Orientation

- Unit Philosophy
- Change Orientation

Quality Climate Indices

- Supportive Unit Climate
- Planning for Improvement and Innovation
- Satisfying Those We Served
- Supportive Work Processes
- Collect Information
- Use Information
- Role of Information
- Unit Efficiency
- Unit Leadership
- Staff Relations
- Professional Development

Quality Outcome Indices

- Supportive Staff Relationships
- Improving Outputs
- Overall Unit Performance
- Rate of Improvement
- Number of Errors and Mistakes
- Cost of Services

CONTENT CATEGORIES AND SUBCATEGORIES OF THE WORK ENVIRONMENT

1. Compensation

Frequency of Mentions of Specific Comments

Salary Topics:

Equity/Compensation Fairness Issues:

- Salary disparity/inequity (i.e. gender)
- Administrators overpaid
- Increases are based on seniority/level/politics, not effort/merit
- Increases are based on individuals' relationships with management
- Compensation not commensurate with workload
- Should not be such large salary differences in same job inside/outside university

Adequacy Issues:

- Compensation inadequate compared to cost of living
- Increases (raises) unfair
- Increases should be dollar amounts, not percentages
- Quality work/effort not rewarded

Effects of Compensation:

- Poor compensation resulting in low staff morale
- Poor compensation resulting in limited incentive to work harder/excel
- Salaries not high enough to recruit/retain qualified people

Benefits Topics:

- Good benefits/Benefits positive aspect of work at university
- Flex benefits of concern
- Dental plan poor
- Unfair vacation/holiday/sick policies
- Concerned about what will happen with benefits in the future

2. Quality Concerns

Frequency of Mentions of Specific Comments

Involvement in/Integration of Quality:

Quality initiatives not yet introduced in unit
Unit management resistant to change/choosing not to practice quality improvement
Administration/mgmt. not truly committed to quality improvement (not "practicing what they preach")
Faculty need to be included in quality improvement initiatives

Dissemination of Quality Principles:

Quality improvement initiatives must be top-down effort
Quality improvement initiatives not filtering down to staff members
Quality improvement initiatives being implemented/catching on too slowly
Management should be required to regularly attend quality training
Application of quality improvement initiatives not appropriate for higher education institutions
More training should be available
Transition to quality principles difficult process

Effects of Quality Improvement Initiatives:

Quality improvement initiatives considered temporary "fad"/buzzword
Quality improvement initiatives useful/having positive impact
Quality improvement initiatives will result in increase in quality over time
Quality improvement initiatives will not have an impact/nothing will change
Quality improvement initiatives waste of time/effort/not being taken seriously
Hope Quality improvement initiatives help!
UM environment needs to change in order for quality improvement initiatives to catch on
Large gap exists between quality improvement theory and practice
Need buy-in from all members of university environment for quality improvement initiatives to catch on

3. Physical Environment Comments

Frequency of Mentions of Specific Comments

Parking:

Parking permits too costly/staff shouldn't have to pay/should be graduated costs
Availability of parking facilities (spaces) inadequate/parking frustrating/parking situation poor

Renovations/Other Physical Environment Issues:

Renovations taking too long
Poor choice of renovations
Deferred maintenance/building conditions of concern
Physical environment depressing/not aesthetically pleasing/antiquated
Personal workspace inadequate/crowded
Smoke-free environment policies on campus discriminate against smokers
Bus system inadequate
Buildings unclean
Safety standards not followed

4. Comments about General Work Environment

Frequency of Mentions of Specific Comments

Negative Environment:

Sexist environment exists at university
Racist environment exists at university
Elitist/"credential-oriented" environment exists at university
University poor/terrible place to work
University stressful/uncaring environment
University lacking in teamwork/competitive environment
Fear of change exists/status quo perpetuated at university
Quality of work environment varies by unit/location
University not sufficiently client-centered
No trust in leadership
No job security at university
University too bureaucratic/too political
Low worker morale exists
Tools are inadequate to effectively perform jobs (computer equipment, etc.)
University tries to look good, not be good
Rude/disrespectful behavior pervades organization
Too little commitment/emphasis on good of university
Personnel problems not dealt with efficiently
No one willing to take responsibility/no accountability
Age discrimination exists at university
Employees (management and staff) only concerned with own welfare/advancement
Too much working for paycheck only/too little effort given to work
Innovation/creativity/individual thinking discouraged
Poor performance rewarded/unpunished
Need more sensitivity/awareness paid to issues related to diversity

Positive Environment:

University good/great place to work
University sufficiently client-centered
Employees are respected/appreciated
Have learned a lot/good environment in which to learn

Staff Issues:

Units generally understaffed for workload
Staff members poorly treated/undervalued/unsupported/less valued than faculty members
Need reward/incentive/worker appreciation system

Organizational Procedures and Structure:

Work processes inefficient/work not taken seriously
Cost-cutting resulting in poor decision-making/decrease in client-centered focus
Few resources/resources utilized poorly
"Good old boy" network still in effect
Decentralized structure of organization leads to feelings of isolation
Staff not included in decision-making
Excessively slow process to eliminate unproductive workers/bring in new workers
Change must be top-down initiative
Too little planning/too little focus on quality

Administration:

Weak management/administration
Top-heavy administration
Management not credible
Management not sensitive to/in-tune with staff
Poor decision-making by management

Opportunities for Advancement/Job Change:

Promotions/opportunities based on relationships/non-work-related factors rather than skill ("it's not what you know but who you know")
Ample opportunities for advancement exist
Few opportunities for advancement exist/job advancement assistance needed

POP/JOBNET/RIF (Job Changing Systems)

Systems for changing jobs ineffective
Systems for changing jobs effective

Communication Issues:

Poor communication/access to information campus-wide
Poor communication among management levels/units/departments

General work environment over time:

General work environment has become more negative over time
General work environment has become more positive over time
General work environment has become more political over time
General work environment has become more stressful over time

5. Comments about Personal Work Experience

Frequency of Mentions of Specific Comments

Co-Workers/Other Staff:

Qualified/Productive
Unqualified/unproductive/unconscientious
Only concerned with paycheck
Supportive/good to work with
Unsupportive/difficult to work with
Resistant to change
Negative/"Gossipy"/no trust among co-workers
Work efforts self-serving
Poor communication among co-workers

Supervisors/Management:

Supervisor/manager treats me/other staff members poorly/unsupportive
Supervisor/manager perpetuates status quo/not innovative/resistant to change
Supervisor/manager competent/supportive
Supervisor incompetent (poor management/leadership skills)
Supervisor's/manager's style fosters morale
Supervisor's/manager's style is detrimental to morale
Supervisor/manager doesn't encourage/permit staff input in decisions
Supervisor/manager encourages/permits staff input in decisions
Supervisor/manager is not trustworthy/does not trust staff
Supervisor/manager trustworthy/trusts staff
Supervisor/manager dishonest/unethical
Communication between supervisor and staff poor
Poor relationship between supervisor and employee
Strong leadership in unit
No supervisor/manager in unit
Supervisor's treatment varies among employees/favoritism exists
Supervisor/manager/unit/all talk, no action
Communication/cooperation between supervisor and staff positive

Immediate supervisor poor/director strong
Supervisor/manager strong/director poor

Unit Characteristics:

Some units better places to work than others

Morale issues:

Low morale in unit
High morale in unit
Staff able to be autonomous
Staff not able to be autonomous
Unit cohesive/teamwork exists
Unit not cohesive/no teamwork exists
Unit male dominated
Unit workload excessive/understaffed for workload
Unit bureaucratic
Quality of work produced in unit high
Unit efficient
Unit inefficient
Unit lacks goals/planning
Support staff valued/appreciated/supported
Support staff not valued/appreciated
No encouragement/recognition of hard work/innovation
Recognition of hard work/innovation
Insufficient opportunities for advancement
Opportunity for advancement/rotation
Harassment ignored/not handled appropriately
Staff not treated as professionals
Employees who leave unit not being replaced in timely manner
Personnel problems not dealt with efficiently/effectively
Unit not sufficiently client-centered
Tools/resources inadequate
Unit currently undergoing change
Unit impeded by lack of helpfulness by others
Unit has become/is becoming more negative over time
Unit has become/is becoming more positive over time
Unit isolated
Centrai administration doesn't support unit/makes unit's operation more difficult
No loyalty shown toward employees
Feedback insufficient

Personal Attitudes:

Dissatisfied and attempting to leave university
Need more flexible hours
Feel discriminated against/uncomfortable
Feel stressed/stressful environment

6. Comments about Staff Development

Frequency of Mentions of Specific Comments

Staff Training and Development:

Opportunities for Development/Training

Ample opportunities for development/training
Insufficient opportunities for development/training/too few classes offered
Emphasis/value placed on development/training
Insufficient training of new/old staff
Staff/management in need of diversity training
Supervisor does not recognize need for/encourage staff development
Shouldn't have to pay for classes on campus
Need more training to keep up with advances in technology
Insufficient funds/money budgeted for training staff
No time for professional development
Opportunities for development/training vary by unit

MOST FREQUENTLY MENTIONED CONTENT SUBCATEGORIES

	TOTAL NUMBER OF MENTIONS*
SALARY DISPARITY EXISTS	32
INCREASES UNFAIR	41
GOOD BENEFITS	53
MGMT. NOT COMMITTED TO QUALITY INITIATIVE	48
PARKING SITUATION POOR	47
U. ENVIRONMENT UNCARING/STRESSFUL	54
U. ENVIRON. COMPETITIVE/NO TEAMWORK	38
U. TOO POLITICAL/BUREAUCRATIC	91
LOW WORKER MORALE EXISTS	54
UNIVERSITY GOOD/GREAT PLACE TO WORK	102
STAFF POORLY TREATED/UNDERVALUED	107
NEED REWARD/INCENTIVE PROGRAM	40
STAFF NOT INCLUDED IN DECISION-MAKING	46
WEAK MANAGEMENT/ADMINISTRATION	122
PROMOTIONS/OPPORTUN. BASED ON FAVORITISM	42
FEW OPPORTUNITIES FOR ADVANCEMENT EXIST	41
U. WORK ENVIRONMENT MORE NEG. OVER TIME	51
CO-WORKERS QUALIFIED/PRODUCTIVE	43
CO-WORKERS SUPPORTIVE/GOOD TO WORK WITH	111
SUPER./MGR. TREATS ME/OTHER STAFF POORLY	42
SUPER/MGR. RESIS. TO CHANGE/NOT INNOVATIVE	36
SUPERVISOR/MANAGER COMPETENT/SUPPORTIVE	44
SUPER./MGR. INCOMPETENT/POOR MGMT. SKILLS	162
SUPER/MGR. NOT ALLOW. STAFF DECISION INPUT	48
POOR COMMUNICATION BETW. SUPER. & STAFF	32
FAVORITISM EXISTS	32
LOW MORALE IN UNIT	50
UNIT COHESIVE/TEAMWORK EXISTS	36
UNIT WORKLOAD EXCESSIVE/UNDERSTAFFED	53
UNIT LACKS GOALS/PLANNING	32
SUPPORT STAFF NOT VALUED/APPRECIATED	50
NO ENCOUR/RECOG. OF HARD WORK/INNOVAT.	40
INSUFFICIENT OPPORTUNITY FOR ADVANCEMENT	30
TOOLS/RESOURCES INADEQUATE	38
UNIT MORE NEGATIVE OVER TIME	44
FEEL STRESSED/STRESSFUL ENVIRONMENT	33
INSUFFICIENT OPPORTUN. FOR TRAIN./DEVELOP.	32

* NOTE: NUMBER OF TOTAL MENTIONS MAY VARY WHEN SEPARATED BY RESPONDENT SUBGROUP BECAUSE OF MISSING OBSERVATIONS (SOME RESPONSES COULD NOT BE CLASSIFIED BY RESPONDENT SUBGROUP)

CONTENT CATEGORIES BY RESPONDENTS' TYPE OF JOB

	P & A	Specialists, Technicians	Office	Eng../Trade/ Svc./Main.	Health Related	Other
Compen. - Total	160 (100%)	25 (100%)	66 (100%)	12 (100%)	11 (100%)	0 (100%)
Compen. - Negative	128 (80.0%)	22 (88.0%)	57 (86.4%)	10 (83.3%)	4 (36.4%)	0 (100%)
Compen. - Positive	32 (20.0%)	3 (12.0%)	9 (13.6%)	2 (16.7%)	7 (63.6%)	0 (100%)
Quality - Total	155 (100%)	12 (100%)	41 (100%)	24 (100%)	7 (100%)	0 (100%)
Quality - Negative	117 (75.5%)	10 (83.3%)	33 (80.5%)	18 (75.0%)	6 (85.7%)	0 (100%)
Quality - Positive	21 (13.5%)	1 (8.3%)	3 (7.3%)	3 (12.5%)	0 (100%)	0 (100%)
Quality - Neutral	17 (11.0%)	1 (8.3%)	5 (12.2%)	3 (12.5%)	1 (14.3%)	0 (100%)
Phys. Env. - Total	57 (100%)	4 (100%)	32 (100%)	6 (100%)	8 (100%)	0 (100%)
Phys. Env. - Negative	57 (100%)	4 (100%)	32 (100%)	6 (100%)	8 (100%)	0 (100%)
Gen. Env. - Total	809 (100%)	78 (100%)	334 (100%)	198 (100%)	40 (100%)	1 (100%)
Gen. Env. - Negative	727 (89.9%)	70 (89.7%)	301 (90.1%)	168 (84.8%)	35 (87.5%)	0 (100%)
Gen. Env. - Positive	68 (8.4%)	7 (9.0%)	27 (8.1%)	30 (15.2%)	4 (10.0%)	1 (100%)
Gen. Env. - Neutral	14 (1.7%)	1 (1.3%)	6 (1.8%)	0 (0.0%)	1 (2.5%)	0 (0.0%)
Person. Exp. Total	777 (100%)	76 (100%)	467 (100%)	114 (100%)	55 (100%)	1 (100%)
Person. Exp. Negative	523 (67.3%)	65 (85.5%)	300 (64.2%)	93 (81.6%)	42 (76.4%)	0 (0.0%)
Person. Exp. Positive	211 (27.2%)	10 (13.2%)	135 (28.9%)	17 (14.9%)	11 (20.0%)	1 (100%)
Person. Exp. Neutral	43 (5.5%)	1 (1.3%)	32 (6.9%)	4 (3.5%)	2 (3.6%)	0 (0.0%)
Staff Devel. Total	63 (100%)	1 (100%)	25 (100%)	8 (100%)	4 (100%)	0 (100%)
Staff Devel. Negative	50 (79.4%)	1 (100%)	12 (48.0%)	8 (100%)	3 (75.0%)	0 (100%)
Staff Devel. Positive	12 (19.0%)	0 (0.0%)	12 (48.0%)	0 (0.0%)	1 (25.0%)	0 (100.0%)
Staff Devel. Neutral	1 (1.6%)	0 (0.0%)	1 (4.0%)	0 (0.0%)	0 (0.0%)	0 (100.0%)

Missing Observations - 88

CONTENT CATEGORIES BY RESPONDENTS' ORGANIZATIONAL FUNCTIONAL AREA

	Pres. Office	Business and Finan.	Academic Affairs	Student Affairs	Research	Develop-ment	University Relations
Compen. - Total	0 (0.0%)	39 (100%)	189 (100%)	19 (100%)	15 (100%)	5 (100%)	8 (100%)
Compen. - Negative	0 (0.0%)	31 (79.5%)	158 (83.6%)	13 (68.4%)	8 (53.3%)	5 (100%)	7 (87.5%)
Compen. - Positive	0 (0.0%)	8 (20.5%)	31 (16.4%)	6 (31.6%)	7 (46.7%)	0 (0.0%)	1 (12.5%)
Quality - Total	0 (0.0%)	67 (100%)	124 (100%)	27 (100%)	16 (100%)	5 (100%)	0 (0.0%)
Quality - Negative	0 (0.0%)	47 (70.1%)	94 (75.8%)	25 (92.6%)	14 (87.5%)	4 (80.0%)	0 (0.0%)
Quality - Positive	0 (0.0%)	14 (20.9%)	12 (9.7%)	1 (3.7%)	1 (6.3%)	0 (0.0%)	0 (0.0%)
Quality - Neutral	0 (0.0%)	6 (9.0%)	18 (14.5%)	1 (3.7%)	1 (6.3%)	1 (20.0%)	0 (0.0%)
Phys. Env. Total	2 (100%)	6 (100%)	83 (100%)	6 (100%)	9 (100%)	1 (100%)	0 (0.0%)
Phys. Env. Negative	2 (100%)	6 (100%)	83 (100%)	6 (100%)	9 (100%)	1 (100%)	0 (0.0%)
Gen. Env. Total	11 (100%)	348 (100%)	858 (100%)	138 (100%)	76 (100%)	20 (100%)	9 (100%)
Gen. Env. Negative	11 (100%)	286 (82.2%)	782 (91.1%)	130 (94.2%)	66 (86.8%)	18 (90.0%)	8 (88.9%)
Gen. Env. Positive	0 (0.0%)	59 (17.0%)	61 (7.1%)	6 (4.3%)	9 (11.8%)	2 (10.0%)	0 (0.0%)
Gen. Env. Neutral	0 (0.0%)	3 (0.9%)	15 (1.7%)	2 (1.4%)	1 (1.3%)	0 (0.0%)	1 (11.1%)
Pers. Exp. Total	18 (100%)	233 (100%)	947 (100%)	130 (100%)	106 (100%)	18 (100%)	38 (100%)
Pers. Exp. Negative	11 (61.1%)	179 (76.8%)	647 (68.3%)	86 (66.2%)	63 (59.4%)	13 (72.2%)	24 (63.2%)
Pers. Exp. Positive	7 (38.9%)	42 (18.0%)	244 (25.8%)	38 (29.2%)	41 (38.7%)	3 (16.7%)	10 (26.3%)
Pers. Exp. Neutral	0 (0.0%)	12 (5.2%)	56 (5.9%)	6 (4.6%)	2 (1.9%)	2 (11.1%)	4 (10.5%)
Staff Dev. Total	1 (100%)	16 (100%)	66 (100%)	4 (100%)	11 (100%)	3 (100%)	0 (0.0%)
Staff Dev. Negative	1 (100%)	14 (87.5%)	50 (75.8%)	2 (50.0%)	4 (36.4%)	3 (100%)	0 (0.0%)
Staff Dev. Positive	0 (0.0%)	2 (12.5%)	14 (21.2%)	2 (50.0%)	7 (63.6%)	0 (0.0%)	0 (0.0%)
Staff Dev. Neutral	0 (0.0%)	0 (0.0%)	2 (3.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

Missing Observations - 85

CONTENT CATEGORIES BY YEARS SPENT WORKING AT UNIVERSITY

	0-4 YEARS	5-10 YEARS	MORE THAN 10 YEARS
Compen. - Total	64 (100%)	107 (100%)	97 (100%)
Compen. - Negative	50 (78.1%)	89 (83.2%)	76 (78.4%)
Compen. - Positive	14 (21.9%)	18 (16.8%)	21 (21.6%)
Quality - Total	59 (100%)	84 (100%)	92 (100%)
Quality - Negative	48 (81.4%)	64 (76.2%)	68 (73.9%)
Quality - Positive	4 (6.8%)	12 (14.3%)	12 (13.0%)
Quality - Neutral	7 (11.9%)	8 (9.5%)	12 (13.0%)
Phys. Environ. - Total	36 (100%)	40 (100%)	30 (100%)
Phys. Environ. - Neg.	36 (100%)	40 (100%)	30 (100%)
Gen. Environ. - Total	407 (100%)	441 (100%)	620 (100%)
Gen. Environ. - Neg.	363 (89.2%)	384 (87.1%)	561 (90.5%)
Gen. Environ. - Pos.	40 (9.8%)	49 (11.1%)	48 (7.7%)
Gen. Environ. - Neut.	4 (1.0%)	8 (1.8%)	11 (1.8%)
Pers. Experience - Total	473 (100%)	550 (100%)	485 (100%)
Pers. Experience - Neg.	323 (68.3%)	379 (68.9%)	335 (69.1%)
Pers. Experience - Pos.	128 (27.1%)	135 (24.5%)	126 (26.0%)
Pers. Exper. - Neut.	22 (4.7%)	36 (6.5%)	24 (4.9%)
Staff Develop. - Total	43 (100%)	31 (100%)	27 (100%)
Staff Develop. - Neg.	29 (67.4%)	24 (77.4%)	21 (77.8%)
Staff Devel. - Pos	13 (30.2%)	7 (22.6%)	5 (18.5%)
Staff Develop. - Neut.	1 (2.3%)	0 (0.0%)	1 (3.7%)

Missing Observations - 102

CONTENT CATEGORIES BY RESPONDENTS' AGE

	UNDER 30	31-40	41-50	51 AND OLDER
Compensation - Total	55 (100%)	102 (100%)	58 (100%)	50 (100%)
Compensation - Negative	42 (76.4%)	87 (85.3%)	43 (74.1%)	40 (80.0%)
Compensation - Positive	13 (23.6%)	15 (14.7%)	15 (25.9%)	10 (20.0%)
Quality - Total	32 (100%)	81 (100%)	84 (100%)	37 (100%)
Quality - Negative	24 (75.0%)	71 (87.7%)	62 (73.8%)	23 (62.2%)
Quality - Positive	3 (9.4%)	8 (9.9%)	7 (8.3%)	10 (27.0%)
Quality - Neutral	5 (15.6%)	2 (2.5%)	15 (17.9%)	4 (10.8%)
Phys. Environment Total	32 (100%)	41 (100%)	24 (100%)	9 (100%)
Phys. Environment Negative	32 (100%)	41 (100%)	24 (100%)	9 (100%)
Gen. Environ. - Total	246 (100%)	446 (100%)	524 (100%)	249 (100%)
Gen. Environment-Negative	225 (91.5%)	398 (89.3%)	463 (88.4%)	219 (88.0%)
Gen. Environment-Positive	17 (6.9%)	38 (8.5%)	54 (10.3%)	29 (11.6%)
Gen. Environment-Neutral	4 (1.6%)	10 (2.2%)	7 (1.3%)	1 (0.4%)
Pers. Experience - Total	311 (100%)	473 (100%)	483 (100%)	237 (100%)
Pers. Experience-Negative	238 (76.5%)	317 (67.0%)	324 (67.1%)	156 (65.8%)
Pers. Experience-Positive	54 (17.4%)	133 (28.1%)	131 (27.1%)	69 (29.1%)
Pers. Experience-Neutral	19 (6.1%)	23 (4.9%)	28 (5.8%)	12 (5.1%)
Staff Development Total	18 (100%)	32 (100%)	40 (100%)	11 (100%)
Staff Development Negative	12 (66.7%)	28 (87.5%)	27 (67.5%)	7 (63.6%)
Staff Development Positive	6 (33.3%)	4 (12.5%)	11 (27.5%)	4 (36.4%)
Staff Development Neutral	0 (0.0%)	0 (0.0%)	2 (5.0%)	0 (0.0%)

Missing Observations - 120

CONTENT CATEGORIES BY RESPONDENTS' LEVEL OF EDUCATION

	LESS THAN BACHELOR'S	BACHELOR'S SOME GRAD	MASTER'S	DOCTORATE	OTHER
Compen. - Total	121 (100%)	101 (100%)	37 (100%)	4 (100%)	5 (100%)
Compen. - Negative	91 (75.2%)	88 (87.1%)	29 (78.4%)	4 (100%)	3 (60.0%)
Compen. - Positive	30 (24.8%)	13 (12.9%)	8 (21.6%)	0 (0.0%)	2 (40.0%)
Quality - Total	79 (100%)	87 (100%)	55 (100%)	14 (100%)	1 (100%)
Quality - Negative	57 (72.2%)	71 (81.6%)	44 (80.0%)	10 (71.4%)	0 (0.0%)
Quality - Positive	13 (16.5%)	7 (8.0%)	5 (9.1%)	2 (14.3%)	1 (100%)
Quality - Neutral	9 (11.4%)	9 (10.3%)	6 (10.9%)	2 (14.3%)	0 (0.0%)
Phys. Env. - Total	49 (100%)	37 (100%)	16 (100%)	0 (100%)	4 (100%)
Phys. Env. - Negative	49 (100%)	37 (100%)	16 (100%)	0 (100%)	4 (100%)
General Env. - Total	652 (100%)	473 (100%)	301 (100%)	42 (100%)	9 (100%)
General Env. - Negative	574 (88.0%)	423 (89.4%)	274 (91.0%)	38 (90.5%)	7 (77.8%)
General Env. - Positive	72 (11.0%)	42 (8.9%)	19 (6.3%)	3 (7.1%)	2 (22.2%)
General Env. - Neutral	6 (0.9%)	8 (1.7%)	8 (2.7%)	1 (2.4%)	0 (0.0%)
Personal Exp. - Total	647 (100%)	504 (100%)	307 (100%)	30 (100%)	22 (100%)
Personal Exp. - Negative	451 (69.7%)	349 (69.2%)	201 (65.5%)	22 (73.3%)	16 (72.7%)
Personal Exp. - Positive	161 (24.9%)	132 (26.2%)	83 (27.0%)	7 (23.3%)	6 (27.3%)
Personal Exp. - Neutral	35 (5.4%)	23 (4.6%)	23 (7.5%)	1 (3.3%)	0 (0.0%)
Staff Devel. - Total	41 (100%)	23 (100%)	33 (100%)	3 (100%)	1 (100%)
Staff Devel. - Negative	26 (63.4%)	17 (73.9%)	29 (87.9%)	2 (66.7%)	0 (0.0%)
Staff Devel. - Positive	14 (34.1%)	6 (26.1%)	3 (9.1%)	1 (33.3%)	1 (100%)
Staff Devel. - Neutral	1 (2.4%)	0 (0.0%)	1 (3.0%)	0 (0.0%)	0 (0.0%)

Missing Observations - 101

CONTENT CATEGORIES BY RESPONDENTS' RACE

	WHITE	NON-WHITE
Compensation - Total	238 (100%)	20 (100%)
Compensation - Negative	190 (79.8%)	15 (75.0%)
Compensation - Positive	48 (20.2%)	5 (25.0%)
Quality - Total	212 (100%)	19 (100%)
Quality - Negative	165 (77.8%)	14 (73.7%)
Quality - Positive	24 (11.3%)	2 (10.5%)
Quality - Neutral	23 (10.8%)	3 (15.8%)
Phyical Environment - Total	89 (100%)	14 (100%)
Physical Environment - Negative	89 (100%)	14 (100%)
Gen. Environment - Total	1260 (100%)	175 (100%)
Gen. Environment - Negative	1129 (89.6%)	148 (84.6%)
Gen. Environment - Positive	111 (8.8%)	25 (14.3%)
Gen. Environment - Neutral	20 (1.6%)	2 (1.1%)
Pers. Experience - Total	1334 (100%)	140 (100%)
Pers. Experience - Negative	929 (69.6%)	91 (65.0%)
Pers. Experience - Positive	332 (24.9%)	42 (30.0%)
Pers. Experience - Neutral	73 (5.5%)	7 (5.0%)
Staff Development - Total	90 (100%)	11 (100%)
Staff Development - Negative	66 (73.3%)	8 (72.7%)
Staff Development - Positive	22 (24.4%)	3 (27.3%)
Staff Development - Neutral	2 (2.2%)	0 (0.0%)

Missing Observations = 227

Appendix X

CONTENT CATEGORIES BY RESPONDENTS' GENDER

	MALE	FEMALE
Compensation - Total	80 (100%)	182 (100%)
Compensation - Negative	70 (87.5%)	139 (76.4%)
Compensation - Positive	10 (12.5%)	43 (23.6%)
Quality - Total	82 (100%)	152 (100%)
Quality - Negative	65 (79.3%)	116 (76.3%)
Quality - Positive	10 (12.2%)	17 (11.2%)
Quality - Neutral	7 (8.5%)	19 (12.5%)
Physical Environ.. - Total	20 (100%)	85 (100%)
Physical Environ. - Negative	20 (100%)	85 (100%)
General Environ. - Total	508 (100%)	964 (100%)
General Environ. - Negative	434 (85.4%)	878 (91.1%)
General Environ. - Positive	70 (13.8%)	67 (7.0%)
General Environ. - Neutral	4 (0.8%)	19 (2.0%)
Personal Exper. - Total	329 (100%)	1167 (100%)
Personal Exper. - Negative	250 (76.0%)	778 (66.7%)
Personal Exper. - Positive	70 (21.3%)	316 (27.1%)
Personal Exper. - Neutral	9 (2.7%)	73 (6.3%)
Staff Development - Total	24 (100%)	77 (100%)
Staff Development - Negative	19 (79.2%)	55 (71.4%)
Staff Development - Positive	5 (20.8%)	20 (26.0%)
Staff Development - Neutral	0 (0.0%)	2 (2.6%)

Missing Observations = 123